

10 Sep 1992

TDRBD-B

REFLECTOMETER, TIME DOMAIN

1. GENERAL. This procurement requires a hand-held, solid-state, time domain reflectometer that operates from a self-contained, replaceable dc power source.

2. CLASSIFICATION. Type II, Class 3, Style E, and Color R in accordance with MIL-T-28800 for shipboard applications.

3. MEASUREMENT REQUIREMENTS. The equipment shall be capable of locating cable faults within the minimum ranges and accuracies specified below. The equipment shall be usable on coaxial, power distribution, and instrumentation cables.

3.1 Range. 1 to 3,000 ft. Velocity of propagation (Vp): 0.25 to 0.95.

3.1.1 Accuracy. $\pm 3\%$ of range.

3.2 Display. The equipment display shall be readable at "arm's length" in accordance with MIL-T-28800 and indicate, as a minimum, the full-scale range, distance to fault, Vp factor, a graphic depiction of the cable response, and a low battery indication.

3.3 Overload protection. 250 Vac.

4. GENERAL REQUIREMENTS.

4.1 Power source. MIL-T-28800 dc internal power source requirements are invoked. The batteries shall be of a commercially available type and provide 12 months of operation before replacement. The nominal power source requirements are not invoked.

4.2 Weight. 1.5 kg (3.3 lb) maximum.

4.3 Dimensions. 254 mm (10 in) high, 127 mm (5 in) wide, and 63.5 mm (2.5 in) deep, maximum.

4.4 Lithium batteries. Per MIL-T-28800, lithium batteries are prohibited without prior authorization. Requests for approving the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.

4.5 Accessories. Test leads and a carrying case.